On the domination number of some graphs.

ABSTRACT

Let $G = (V,E)$ be a simple graph. A set $S \subseteq V$ is a dominating set of graph G, if every vertex in $V - S$ is adjacent to at least one vertex in S. The domination number $\gamma(G)$ is the minimum cardinality of a dominating set in G. It is well known that if $e \in E(G)$, then $\gamma(G-e)-1 \leq \gamma(G) \leq \gamma(G-e)$. In this paper, as an application of this inequality, we obtain the domination number of some certain graphs.

Keyword: Domination number; Dominating set; Graph.